Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A spatial light modulator comprising:

a magnetic layer that is made of a magneto-optic material and includes a plurality of pixels in each of which a magnetization direction is independently set and each of which has a function of causing a rotation of a polarization direction of incident light depending on the magnetization direction by a magneto-optic effect;

a plurality of first conductor layers and a plurality of second conductor layers arranged to intersect with each other at positions corresponding to the individual pixels, through which currents for generating magnetic fields to set the magnetization directions in the individual pixels are passed; and

a plurality of dielectric layers for enhancing the function of the pixels.

2. (Original) A spatial light modulator according to claim 1, wherein the magnetic layer, the first conductor layers, the second conductor layers and the dielectric layers constitute a one-dimensional magnetophotonic crystal.

3. (Original) A spatial light modulator according to claim 1, wherein the first conductor layers and the second conductor layers are placed to sandwich the magnetic layer.

4. (Original) A spatial light modulator according to claim 1, wherein the first conductor layers and the second conductor layers each include narrow portions each having a width smaller than that of another portion, and the narrow portions of the first conductor layers and the narrow portions of the second conductor layers are arranged to overlap with each other.

5. (Original) A spatial light modulator according to claim 4, wherein each of the narrow portions of the first conductor layers and each of the narrow portions of the second conductor layers forms a curved current path around a specific region in each of the pixels.

6. (Original) A spatial light modulator according to claim 4, wherein the narrow portions of the first conductor layers and the narrow portions of the second conductor layers are arranged to overlap with each other in the vicinities of peripheries of the pixels.

7. (Original) A spatial light modulator according to claim 1, wherein the first conductor layers and the second conductor layers are transparent to the incident light.

8. (Original) A spatial light modulator according to claim 1, further comprising: an incidence/outgoing plane on and of which light is incident and goes out; and a reflective layer that reflects light and is provided at a side opposite to the incidence/outgoing plane with the magnetic layer interposed therebetween.

9. (Original) A spatial light modulator according to claim 8, further comprising an optical rotatory layer that is provided to be adjacent to the incidence/outgoing plane and rotates a polarization direction of passing light by a predetermined angle by the magneto-optic effect.

10. (Original) A spatial light modulator according to claim 1, further comprising a magnetic domain wall movement inhibiting portion that is provided at a boundary position between adjacent ones of the pixels and inhibits movement of a magnetic domain wall beyond the boundary position.

11. (Original) A spatial light modulator according to claim 1, wherein the magnetic layer is formed of a magnetic garnet thin film.

12. (New) A spatial light modulator according to claim 1, wherein the plurality of first conductor layers and the plurality of second conductor layers are arranged to intersect with each other at positions overlapping at least portions of the individual pixels.